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| 10/658,573      | 09/09/2003  | Michael J. Miller    | 40055-15            | 3404             |

572 7590 03/02/2004

CLIFFORD A. POFF  
9800B MCKNIGHT ROAD  
SUITE 115  
PITTSBURGH, PA 15237

EXAMINER

FERGUSON, MARISSA L

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2854

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,573

Applicant(s)

MILLER ET AL.

Examiner

Marissa L Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,10 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller (US Patent 4,520,727).

Regarding claim 1, Miller teaches a stencil screen (14) having a desired pattern (26) to be imprinted defined by paint pervious openings bounded by an adhered paint-impervious layer (Column 4, Lines 24-25 and Lines 46-48), a rectangular stencil screen frame (10) including upstanding elongated sidewalls (11) joined by spaced apart upstanding end walls (12) to circumscribe a screen window opening establishing a stencil screen support plane, said upstanding elongated sidewalls having sufficient resiliency to restore said stencil screen to said stencil screen support plane when displaced there from by a squeegee while traversing said desired pattern to be imprinted (Abstract, Column 2, Lines 1-33 and Lines 52-59) and screen support arms (17,18) secured to said rectangular stencil screen frame to extend outwardly from said end walls.

Regarding claim 2, Miller teaches upstanding elongated sidewalls (11) have a sufficiently thin wall thickness to allow resilient torsional displacement about axes

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parallel to the elongated length of said upstanding elongated sidewalls (Column 3, Lines 12-58).

Regarding claim 10, Miller teaches screen support arms including elongated plainer arms (15) having sufficient resiliency to allow displacement of said stencil screen frame by a squeegee while traversing said desired pattern to be imprinted (Abstract, Column 2, Lines 52-56 and Column 3, Lines 42-49).

Regarding claim 13, Miller teaches upstanding elongated sidewalls (15) have sufficient resiliency to maintain preloaded stressing of said stencil screen along opposite longitudinal sides thereof (Column 2, Lines 1-33).

Regarding claim 14, Miller teaches a stencil screen (14) having a desired pattern (26) to be imprinted defined by an adhered paint-impervious layer (Column 4, Lines 24-25 and Lines 46-48), a rectangular stencil screen frame (10) including upstanding elongated sidewalls (11) joined by spaced apart upstanding end walls (12) to circumscribe a screen window opening establishing a stencil screen support plane (Figure 1) and screen support arms (17, 18) secured to said rectangular stencil screen frame (10) to extend outwardly from said end walls (15), said screen support arms having sufficient resiliency to restore said stencil screen to said stencil screen support plane when displaced there from by a squeegee while traversing said desired pattern to be imprinted (Abstract and Column 2, Lines 1-33 and Lines 52-59).

Regarding claim 15, Miller teaches a stencil screen (14) having a desired pattern (26) to be imprinted defined by an adhered paint-impervious layer (Column 4, Lines 24-25 and Lines 46-48), said stencil screen having sufficient strength transversely to plane

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of the screen to allow deflection from the plane of the screen without elastic deformation (Column 2, Lines 1-33 and Column 3, Lines 12-53), a stencil screen frame (10) including upstanding elongated sidewalls (11) joined by spaced apart upstanding end walls (12) to circumscribe, a screen window opening establishing a stencil screen support plane (Figure 1) and screen support arms (17,18) secured to said stencil screen frame to extend outwardly from said end walls (12), at least one of said upstanding elongated sidewalls and said screen support arms having sufficient resiliency to restore said stencil screen to said stencil screen support plane when displaced there from by a squeegee while traversing said desired pattern to be imprinted (Column 2, Lines 1-33, Lines 52-59, Column 3, Lines 33-49, 67-68 and Column 4, Lines 1-4).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,520,727) in view of Miller et al. (US Patent 3,167,004).

Regarding claims 3, 5 and 11, Miller teaches the claimed invention, however he does not explicitly disclose an L-shaped cross section with elongated sidewalls having upstanding heights defining an ink reservoir volume above a projecting foot of the L-shaped cross sectional configuration, wherein the projecting foot of each of the

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upstanding elongated sidewalls define a screen mounting shelf, and wherein end walls are half divided and integral with elongated sidewalls. Miller et al. teaches an L-shaped configuration with projecting walls defining an medium reservoir defining a shelf portion, wherein the end walls are half divided and integral with sidewalls (Column 3, Lines 7-33, Column 5, Lines 1-17 and Figures 4,5 and 11). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Miller to include the L-shaped configuration as taught by Miller et al., since Miller et al. teaches the configuration for reinforcing the wall members and for providing the necessary force needed to maintain the stencil screen in a firm/secure condition.

Regarding claim 4, Miller teaches a projecting foot that defines an attachment site for adherence of a stencil screen (Column 2, Lines 56-59).

Regarding claim 12, Miller teaches screen support arms (17,18) further include mounting legs (15) joined to structurally reinforce an end wall (Figure 3).

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,520,727) in view of Miller et al. (US Patent 3,167,004) as applied to claims 1 and 5 above, and further in view of Messerschmitt (US Patent 4,373,441).

Regarding claims 6-8, Miller and Miller et al. both teach the invention except for an electrically insulating coating/layer adhesive on elongated sidewalls and upstanding end walls to electrically insulate a rectangular stencil screen frame from a stencil screen, wherein the coating bounds an outer marginal edge portion of a stencil screen and a stencil screen including electrically conductive terminal end portions extending

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from upstanding elongated sidewalls along screen support arms and pressed into electrically conductive contact. Mersserschmitt teaches an electrically insulating coating/layer of adhesive (6) on elongated sidewalls and upstanding end walls to electrically insulate a rectangular stencil screen frame from a stencil screen (Column 3, Lines 41-67), wherein the coating bounds an outer marginal edge portion of a stencil screen to a mounting shelf (1 and Figures 6, 6A-C, 7 and 7A-C) and a stencil screen including electrically conductive terminal end portions (5) extending from upstanding elongated sidewalls (1.3 and 1.4) along screen support arms and pressed into electrically conductive contact (Figure 8).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the invention taught by Miller to include the insulating layer and terminals as taught by Mersserschmitt, since Mersserschmitt uses the layer and terminals for providing an electrical connection between a source and a stencil screen.

Regarding claim 9, Miller teaches screen support arms (17,18) including frame support sites spaced outwardly from elongated bus bar (21,23) sites that substantially correspond to the width of a stencil screen traversing spaced apart end walls and wherein the elongated bus bar sites define compression sites for establishing an electrical conductivity with electrical bus bars (Column 2, Lines 61-68).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571)

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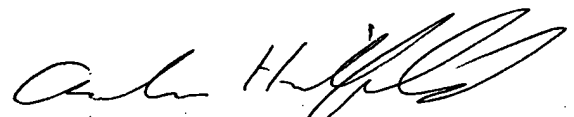
272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson  
Examiner  
Art Unit 2854

MLF  
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ANDREW H. HIRSHFELD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800